

MEMORANDUM OF UNDERSTANDING FOR EXCHANGE OF INFORMATION
CONCERNING COAL CONVERSION, EXTRACTION AND PROCESSING
BETWEEN THE U.S. DEPARTMENT OF ENERGY AND THE AUSTRALIAN
DEPARTMENT OF NATIONAL DEVELOPMENT

The U.S. Department of Energy (DOE) and the Australian
Department of National Development (Department),

Recognizing their mutual interest in the utilization of
coal resources, and desiring to exchange information to
further the development of processes and equipment
concerned with coal, have agreed on the following arrangements:

ARTICLE 1

The objective of cooperation under this Memorandum of Understanding is to establish, for the mutual benefit of the Parties, a reasonably balanced exchange of information in the areas of coal conversion, extraction, processing technology, mining and MHD. The areas and forms of cooperation are listed under Articles 2 and 3 respectively.

ARTICLE 2

The areas of cooperation covered by this Memorandum of Understanding may include:

1. Gasification systems and processing technology, including desulphurization techniques, for:
 - a. synthetic gas,
 - b. high BTU gas, and
 - c. in situ gasification;
2. Hydrogenation systems for synthetic crude oil;
3. Solvent extraction for:
 - a. synthetic crude oil, and
 - b. chemical manufacture:
4. Automatic continuous measurement of coal characteristics (e.g., sulphur and ash contents);

5. Advanced power systems, and MHD;
6. Fluidized-bed combustion; and
7. Development, design, construction, and operation of the foregoing systems.
8. Coal mining and coal preparation research including:
 - a. Improved techniques for surface and underground coal mining
 - b. Automation of machine functions and systems
 - c. Mine entry drivage methods
 - d. Coal seam exploration techniques
 - e. Improved mine design techniques for surface and underground mining including safety, resource recovery, and environmental considerations
 - f. Coal preparation techniques including product monitoring and control of plant solid and liquid disposal.

Other areas may be added by the Parties by mutual agreement in writing.

ARTICLE 3

Cooperation in accordance with this Memorandum of Understanding may include but is not limited to the following forms:

1. Exchange of scientists, engineers and other specialists. Such exchanges of staff shall be in accordance with Article 9 of this Memorandum of Understanding.

2. Exchange of samples, materials, instruments and components for testing. Such an exchange would be implemented subject to a separate memorandum executed by both parties.
3. Exchange, on a current basis, of scientific and technical information, and results and methods of research and development.
4. The organization of seminars and other meetings on specific agreed topics concerning coal technologies in the areas listed in Article 2, in a manner agreed by the coordinators (Article 4).
5. Short visits by specialist teams or individuals to the coal research facilities of the other Party.

Other specific forms of cooperation may be added by the Parties by mutual agreement in writing.

ARTICLE 4

1. To supervise the execution of this Memorandum of Understanding, the Parties will name Coordinators. As deemed necessary the Coordinators shall meet to evaluate the status of cooperation under this Memorandum of Understanding. This evaluation shall include a comprehensive review of each Party's coal conversion, extraction, and processing program status plans, an assessment of the balance of exchanges in the various areas of cooperation listed in Article 2, and a consideration of measures required to correct any imbalances. In addition, the Coordinators shall consider and act on

any major new proposals for cooperation. These meetings shall be held alternatively in Australia and the United States.

2. Day to day management of the cooperation under this Memorandum of Understanding shall be carried out by correspondents designated by the Coordinators. The correspondents shall agree on specific programs of cooperation in their respective areas, within policy guidelines set by the Coordinators. The correspondents shall be responsible for the working contacts between the Parties in their respective areas of cooperation.

ARTICLE 5

If it is decided a cooperative program or project under this Memorandum of Understanding should be subject to a formalized specific memorandum executed by both Parties, the specific memorandum should cover all detailed provisions for implementing that memorandum, including such matters as patents, exchange of equipment and information disclosure specific to the particular program or project.

ARTICLE 6

1. General

The Parties support the widest possible dissemination of information provided or exchanged under this Memorandum of Understanding, subject to the need to protect proprietary information exchanged hereunder, and to the provisions of Article 8.

2. Use of Proprietary Information

A. Definitions as used in this Memorandum of Understanding

(i) The term "information" means scientific or technical data, results or methods of research and development, and any other information intended to be provided or exchanged under this Memorandum of Understanding.

(ii) The term "proprietary information" means information which contains trade secrets or commercial or financial information which is privileged or confidential, and may only include such information which:

- a) has been held in confidence by its owner;
- b) is of a type which is customarily held in confidence by its owner;
- c) has not been transmitted by the transmitting Party to other entities (including the receiving Party) except on the basis that it be held in confidence; and
- d) is not otherwise available to the receiving Party from another source without restriction on its further dissemination.

B. Procedures

- (i) A Party receiving proprietary information pursuant to this Memorandum of Understanding shall respect the privileged nature thereof. Any document which contains proprietary information shall be clearly marked with the following (or substantially similar) restrictive legend:

"This document contains proprietary information furnished in confidence under a Memorandum of Understanding dated _____ between the United States Department of Energy and the Australian Department of National Development and shall not be disseminated outside these organizations, their contractors, licensees and the concerned departments and agencies of the governments of the U.S. and Australia without the prior approval of _____."

This notice shall be marked on any reproduction hereof, in whole or in part. These limitations shall automatically terminate when this information is disclosed by the owner without restriction."

- (ii) Proprietary information received in confidence under this Memorandum of Understanding may be disseminated by the receiving Party to:
- a) persons within or employed by the receiving Party, and other concerned Government departments and Government agencies in the country of the receiving Party;
 - b) prime or subcontractors of the receiving Party located within the geographical

limits of the receiving Party's nation, for use only within the framework of their contracts with the receiving Party in work relating to the subject matter of the proprietary information;

provided that any proprietary information so disseminated shall be pursuant to an agreement of confidentiality and shall be marked with a restrictive legend substantially identical to that appearing in sub-paragraph 2.B(i) above.

(iii) With the prior written consent of the Party providing proprietary information under this Memorandum of Understanding, the receiving Party may disseminate such proprietary information more widely than otherwise permitted in the foregoing subsection (ii). The Parties shall cooperate with each other in developing procedures for requesting and obtaining prior written consent for such wider dissemination, and each Party will grant such approval to the extent permitted by its national policies, regulations and laws.

C. Each Party shall exercise its best efforts to ensure that proprietary information received by it under this Memorandum of Understanding is

controlled as provided herein. If one of the Parties becomes aware that it will be, or may reasonably be expected to become, unable to meet the non-dissemination provisions of this Article, it shall immediately inform the other Party. The Parties shall thereafter consult to define an appropriate course of action.

D. Information arising from seminars and other meetings arranged under this Memorandum of Understanding and information arising from the attachments of staff, use of facilities and joint projects shall be treated by the Parties according to the Principles specified in this Article; provided, however, no proprietary information orally communicated shall be subject to the limited disclosure requirements of this Memorandum of Understanding unless the individual communicating such information places the recipient on notice as to the proprietary character of the information communicated.

E. Nothing contained in this Memorandum of Understanding shall preclude the use of dissemination of information received by a Party through arrangements other than those provided for under this Memorandum of Understanding.

ARTICLE 7

Information transmitted by one Party to the other Party under this Memorandum of Understanding shall be accurate to the best knowledge and belief of the transmitting party, but

the transmitting party does not warrant the suitability of the information transmitted for any particular use or application by the Receiving Party or by any third Party. Information developed jointly by the Parties shall be accurate to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed information or its suitability for any particular use or application by either Party or by any third Party.

ARTICLE 8

1. With respect to any invention or discovery made or conceived in the course of or under this Memorandum of Understanding:

a. If made or conceived by personnel of one Party (the Assigning Party) or its contractors while assigned to the other party (Recipient Party) or its contractors in connection with exchanges of scientists, engineers and other specialists:

(1) The Recipient Party shall acquire all right, title and interest in and to any such invention or discovery in its own country and in third countries, subject to a non-exclusive, irrevocable, royalty-free license in all such countries to the Assigning Party, with the right to grant sublicenses, under any such invention or discovery and any patent application, patent or other protection relating thereto.

- (2) The Assigning Party shall acquire all right, title and interest in and to any such invention or discovery in its own country, subject to a non-exclusive, irrevocable, royalty-free license to the Recipient Party, with the right to grant sublicenses, under any such invention or discovery and any patent application, patent or other protection relating thereto.
- b. If made or conceived by a Party or its contractors as a direct result of employing information which has been communicated to it under this Memorandum of Understanding by the other Party or its contractors or communicated during seminars or other joint meetings, the Party making the invention shall acquire all right, title and interest in and to such invention or discovery in all countries, subject to a grant to the other Party of a royalty-free, non-exclusive, irrevocable license with the right to grant sublicense in and to any such invention or discovery and any patent application, patent or other protection relating thereto, in all countries.
- c. With regard to other specific forms of cooperation, including loans or exchanges of materials, instruments and equipment for special joint research projects, the Parties shall provide for appropriate distribution of rights to inventions or discoveries resulting from such cooperation.

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In general, however, each Party should normally own the rights to such inventions or discoveries in its own country with a non-exclusive, irrevocable, royalty-free license to the other Party, and the rights to such inventions or discoveries in other countries should be agreed by the Parties on an equitable basis.

2. Neither Party shall discriminate against citizens of the country of the other Party with respect to granting any license or sublicense under any invention or discovery pursuant to paragraph 1 above. It is understood that the licensing policies and practices of each Party may be affected because of the rights of both Parties to grant licenses within a single jurisdiction. Accordingly, either Party may request, in regard to a single invention or discovery or class of inventions or discoveries, that the Parties consult in an effort to lessen or eliminate any detrimental effect that the parallel licensing authorities may have on the policies and practices of the Parties.
3. Each Party shall assume the responsibility to pay awards or compensation required to be paid to its own nationals according to its own laws.

ARTICLE 9

1. Whenever an exchange of staff is contemplated under this Memorandum of Understanding, each Party shall ensure that qualified staff are selected for attachment to the other Party.

2. Each such attachment of staff shall be the subject of a separate attachment agreement between the Parties.
3. Each Party shall be responsible for the salaries, insurance and allowances to be paid to its staff.
4. Each Party shall pay for the travel and living expenses of its staff while on attachment to the host Party unless otherwise agreed.
5. The host establishment shall arrange for comparable accommodations for the other Party's staff and their families on a mutually agreeable reciprocal basis.
6. Each Party shall provide all necessary assistance to the attached staff (and their families) of the other Party as regards administrative formalities (travel arrangements, etc.)
7. The staff of each Party shall conform to the general and special rules of work and safety regulations in force at the host establishment, or as agreed in separate attachment of staff agreements.

ARTICLE 10

The provisions of this Memorandum of Understanding shall not affect the rights or duties of the Parties hereto under other agreements or arrangements. This Memorandum of Understanding also in no way precludes commercial firms or other legally constituted enterprises in each of the two countries from engaging in commercial dealings in accordance with the applicable laws of each country; nor

does it preclude the Parties from engaging in activities with other governments or persons. Moreover, it is expected that the present Memorandum of Understanding shall facilitate industrial and commercial exchanges in the field of coal technology between the firms of the countries of the Parties with a view to mutual benefits from such exchanges for both countries. DOE and the Department shall act as the points of coordination for contracts and arrangements involving commercial firms in their respective countries when such firms or enterprises act on behalf of their respective governments under the terms of this Memorandum of Understanding. It is understood that all such contracts and arrangements shall conform with applicable laws and regulations under which each Party operates.

ARTICLE 11

Cooperation under this Memorandum of Understanding shall be in accordance with laws of the respective countries and the regulations of the respective Parties. All questions related to the Memorandum of Understanding arising during its term shall be settled by the Parties by mutual agreement.

ARTICLE 12

Except when otherwise specifically agreed at the time, all costs resulting from cooperation under this Memorandum of Understanding shall be borne by the Party that incurs them. The implementation of this Memorandum of Understanding will be subject to the availability of appropriated funds.

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ARTICLE 13

1. This Memorandum of Understanding shall enter into force upon signature and, subject to paragraph 2 of this Article, shall continue for a five (5)-year period. This Memorandum of Understanding may be extended subject to agreement by the Parties following a review of accomplishments under the Memorandum of Understanding.
2. This Memorandum of Understanding may be terminated at any time at the discretion of either Party, upon six (6) months advance notification in writing by the Party seeking to terminate the Memorandum of Understanding. Such termination shall be without prejudice to the rights which may have accrued under this Memorandum of Understanding to either Party up to the date of such termination.
3. In the event that, during the period of this Memorandum of Understanding the nature of either Party's coal conversion, extraction and processing programs should change substantially whether this be by substantial expansion, reduction, transformation or amalgamation of major elements with the coal conversion, extraction and processing programs of a third party, either Party shall have the right to request revisions in the scope and/or terms of this Memorandum of Understanding.

4. All joint efforts and experiments not completed at the expiration or termination of this Memorandum of Understanding may be continued until their completion under the terms of this Memorandum of Understanding.

Done at Canberra this 23rd day of June
1978.

FOR THE UNITED STATES
DEPARTMENT OF ENERGY

NAME: Christopher A. Squire
TITLE: Charge d' Affaires, a.i.

FOR THE AUSTRALIAN DEPARTMENT
OF NATIONAL DEVELOPMENT

NAME: A. J. Woods
TITLE: Secretary